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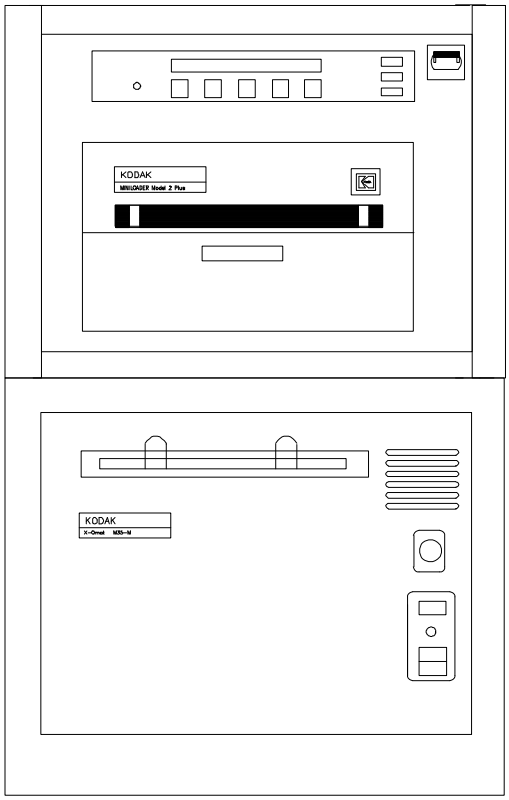
INSTALLATION INSTRUCTIONS

for the

Kodak MINILOADER 2 PLUS LOW VOLTAGE



Use this Publication for:-
MINILOADER 2 Plus Low Voltage Model Stand-Alone (SV code 3419), MINILOADER 2 Plus Low Voltage Model M35-M (SV code 3420) and MINILOADER 2 Plus Low Voltage Model 480RA (SV code 3421).

HEALTH SCIENCES DIVISION

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This equipment includes parts and assemblies sensitive to damage from electrostatic discharge. Use caution to prevent damage during all service procedures.

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UNPACKING AND INSTALLATION INSTRUCTIONS FOR M35-M VERSION.

NOTE :- A 5 or 6 amp fused supply should be provided for the MINILOADER.

1. The MINILOADER is in the smaller of the two PACKING CASES, the larger CASE contains the STAND for the MINILOADER and the parts for the M35-M.

2. Remove the BANDING from the larger PACKING CASE and lift the CARTON off the PALETTE.

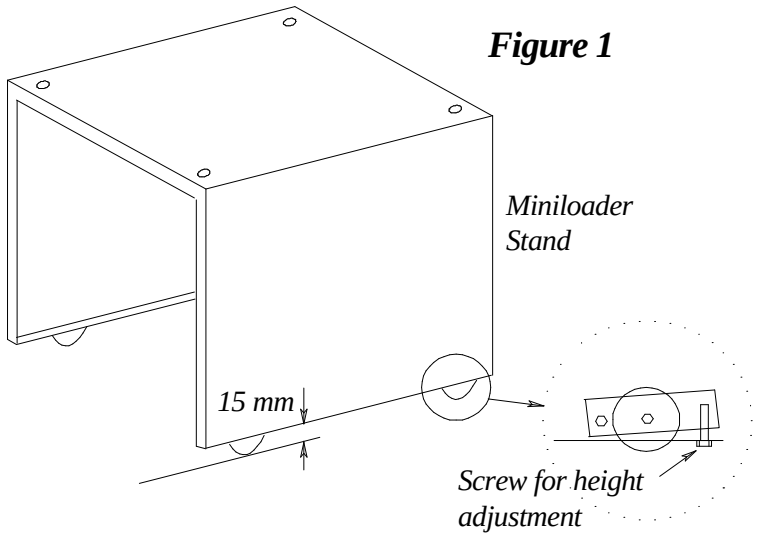
3. Unpack and check all the parts. The CASE should contain :-

PART	QUANT.	DESCRIPTION
30015562	8	COUNTERSUNK SCREWS M4x12 - (FOR PROCESSOR PANEL FIXING)
30015569	1	PLAIN WASHER M4 - (LEFT HAND PROCESSOR PANEL FIXING)
30015612	2	NUT M4 - (LEFT HAND PROCESSOR PANEL FIXING)
30015655	4	SCREW, HEXAGONAL, M8x20 - (FASTENING MINI. TO THE STAND)
30015669	2	STAR WASHER M4 - (FAN GRID GROUNDING)
30015691	1	SCREW M4x12 - (LEFT HAND PROCESSOR PANEL FIXING)
30025836	4	STAR WASHER M10 - (USED TO GROUND M35-M TO PLINTH)
30025838	4	STAR WASHER M8 - (USED TO GROUND MINILOADER TO STAND)
30025842	7	CUP WASHER M4 - (FOR PROCESSOR PANEL FIXING)
30025843	8	CAGED NUT M4 - (FOR PROCESSOR PANEL FIXING)
30026148	1	STAND ASSY. - (FOR MINILOADER)
30026149	1	FRONT PANEL ASSY. - M35-M
30026151	1	REAR PANEL ASSEMBLY - M35-M (INCLUDES 30026153 & 30026157)
30026155	1	DRIER EXIT PLATE - M35-M
30026162	1	PLINTH - M35-M
30026172	6	RETAINING BLOCKS
30026180	1	PROCESSOR LIGHT BAFFLE
30026205	1	M35-M TRANSPARENT PANEL - LEFT
30026206	1	M35-M TRANSPARENT PANEL - RIGHT
30026252	1	M35-M TRANSPARENT PANEL - FRONT
30025253	1	M35-M FAN GRID
30026254	1	BRACKET, M35-M TRANSPARENT PANEL RIGHT, RETAINING
30026255	1	PLATE, M35-M MAINS SWITCH PROTECTING

4. In the position where the MINILOADER is to stand, (the rear of the STAND is the open end), level the STAND using the JACKING SCREWS leaving a gap of approximately 15 mm between the floor and the bottom of the STAND. See FIGURE 1.

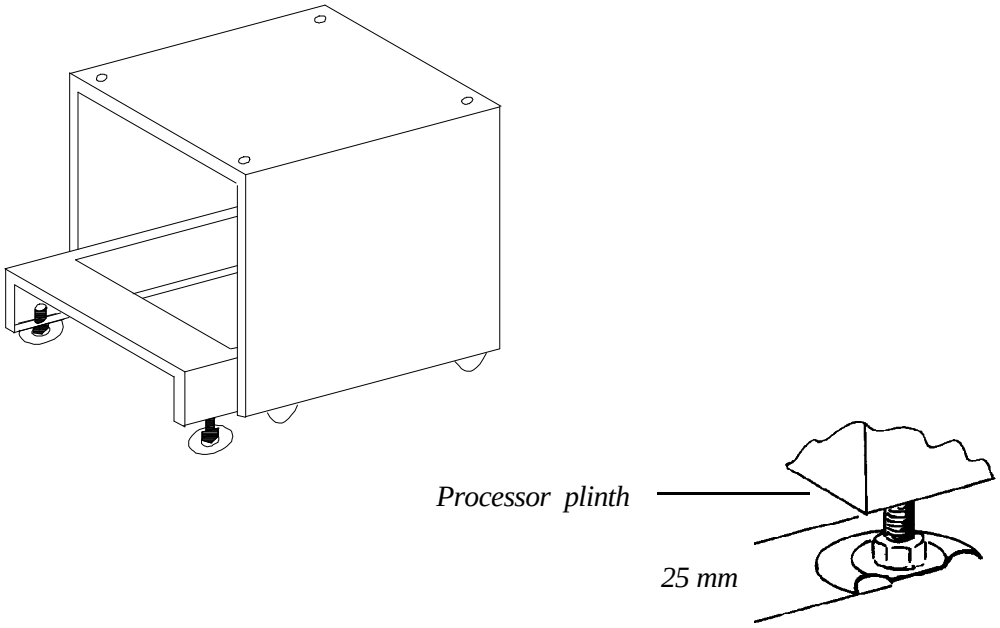
5. Unpack the M35-M PROCESSOR, remove the LID, FRONT PANEL, and the two SIDE PANELS. Unscrew the STAND-BY OVERRIDE BUTTON from the REAR PANEL (leave the wires connected). Remove the REAR PANEL, disconnecting the EXHAUST HOSE from the EXHAUST ADAPTOR. Remove the EXHAUST ADAPTOR, and the PANEL FIXING SCREWS and RETAINING WASHERS from the REAR PANEL and keep. Discard all PANELS.

Figure 1



6. Place the PROCESSOR PLINTH (the PLINTH is symmetrical, it can be either way round) in position under the STAND. Roll the MINILOADER STAND away and install the FLOOR PLATES supplied with the PROCESSOR under the LEVELLING FEET, and level the PLINTH leaving a gap of approximately 25 mm between the floor and the bottom of the PLINTH. See FIGURE 2.

Figure 2



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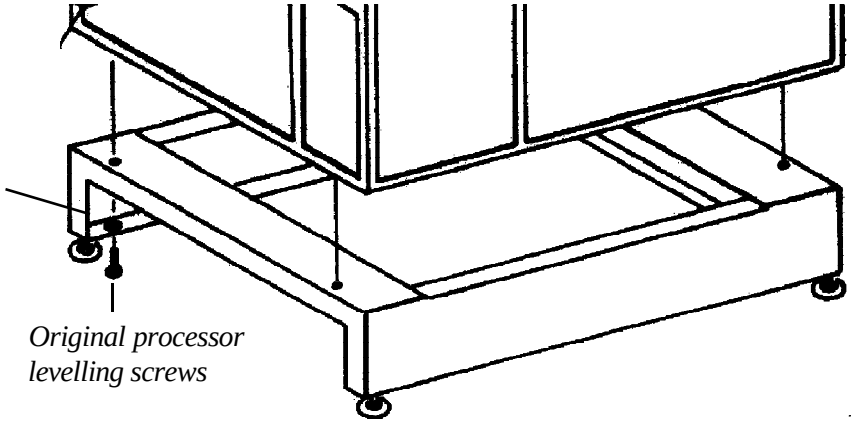
7. Roll the STAND away and install the PROCESSOR on the PLINTH, the front of the PROCESSOR towards the front of the STAND, and secure it using the SCREWS supplied with the PROCESSOR and the M10 STAR WASHERS supplied in the kit. See FIGURE 3. IMPORTANT, MAKE SURE THERE IS NO PAINT ON THE PROCESSOR PLINTH WHERE THE STAR WASHERS CONNECT.

FIGURE 3



8. Remove the BANDING from the smaller PACKING CASE then lift the CARTON off the MINILOADER PALETTE.

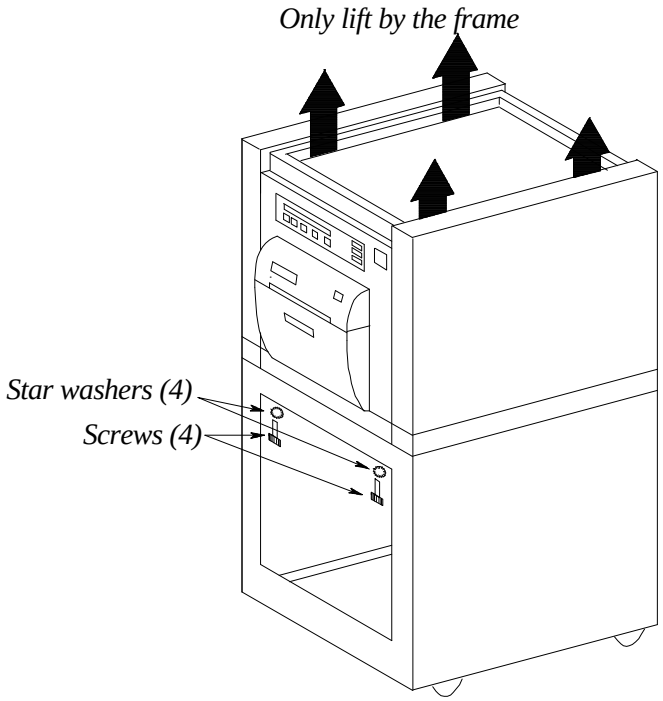
9. Remove the MAGAZINES from the top of the MINILOADER and unpack them. The case should contain:-

PART No.	QUANT	DESCRIPTION
xxxxxxxx	1	MINILOADER 2 PLUS M35-M VERSION
30023169	1	SUPPLY MAGAZINE 18x24 MAMMO
30023168	1	SUPPLY MAGAZINE 24x30 MAMMO
30026197	1	SUPPLY MAGAZINE 8x10 INCH VIDEO
30023197	1	SERIAL UNLOADING MAGAZINE 18x24 MAMMO
30026262	1	SERIAL UNLOADING MAGAZINE 24x30 MAMMO
30025849	1	CAN OF TOUCH-UP PAINT

10. Remove the LID and lift the MINILOADER onto its STAND. The front of the MINILOADER is at the front of the STAND. IMPORTANT - ONLY LIFT THE MINILOADER BY THE FRAME AS SHOWN IN FIGURE 4.

!! CAUTION TWO PEOPLE ARE REQUIRED TO LIFT THE MINILOADER !!

Figure 4



11. Secure the MINILOADER on it's STAND using the four socket head SCREWS and M8 STAR WASHERS supplied with the STAND. IMPORTANT - ENSURE THERE IS NO PAINT ON THE STAND WHERE THE STAR WASHERS CONNECT.

12. Remove the left hand SIDE PANEL from the MINILOADER.

13. Remove the following PACKING PROTECTIONS :-

    a) The two RUBBER TIES that restrain the two SUCKER BARS.

    b) The packing BLOCKS under the TWO SUCKER BARS.

    c) The protection PACKING from the film exit CHUTE.

    d) The TIE-WRAP from the MAGAZINE INJECTOR BAR.

    e) The TIE from the CASSETTE INJECTOR.

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14. Mount the six aluminium RETAINING BLOCKS on the top of the PROCESSOR FRAME as shown in FIGURE 5. Use the MINILOADER STAND as a guide to position the BLOCKS on the front of the PROCESSOR.

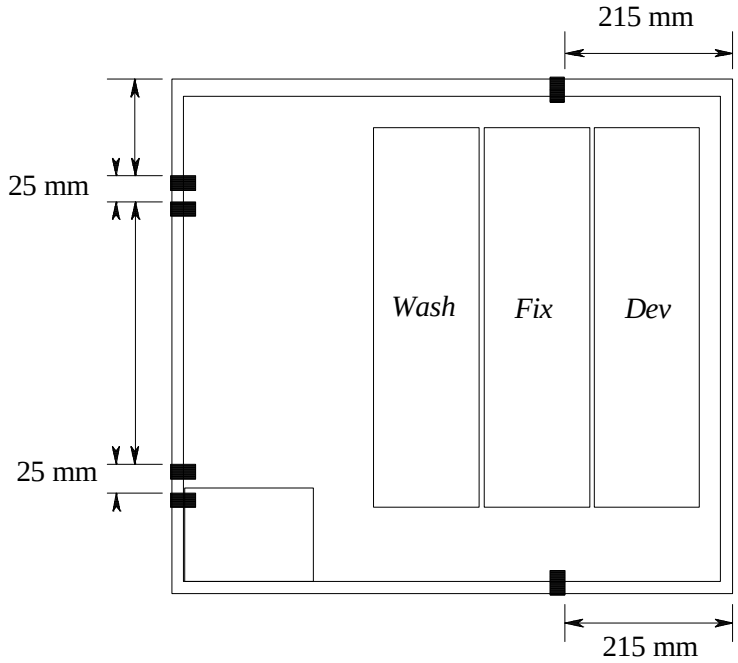
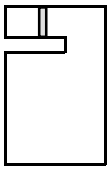


Figure 5

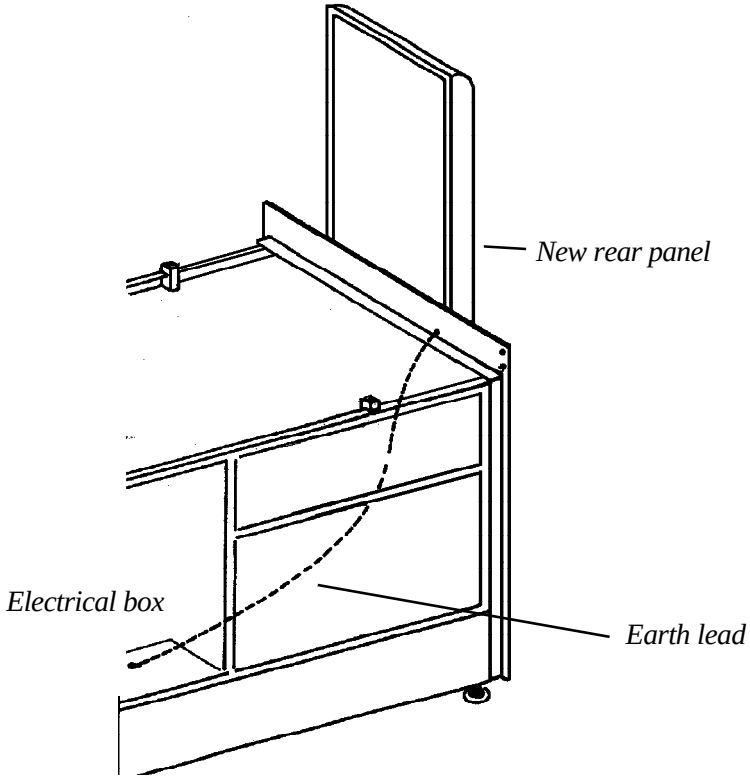


Blocks mount this way up.

15. Refit the EXHAUST ADAPTOR (removed in step 5) to the new PROCESSOR REAR PANEL using the existing HARDWARE. Fit the new REAR PANEL to the PROCESSOR using the original SCREWS etc. Connect the EARTH LEAD from the PANEL to the M35-M ELECTRICAL BOX as shown in FIGURE 6.

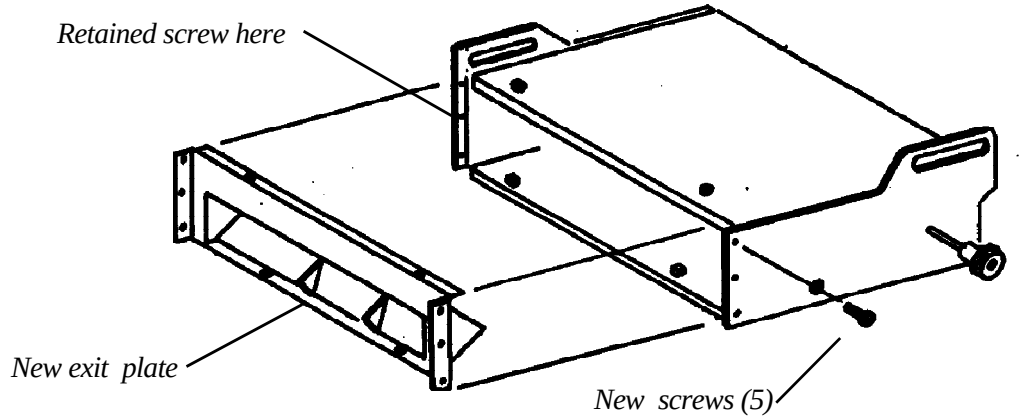
16. Refit the STAND-BY/RUN SWITCH. Reconnect the M35-M EXHAUST HOSE to the EXHAUST ADAPTOR.

Figure 6



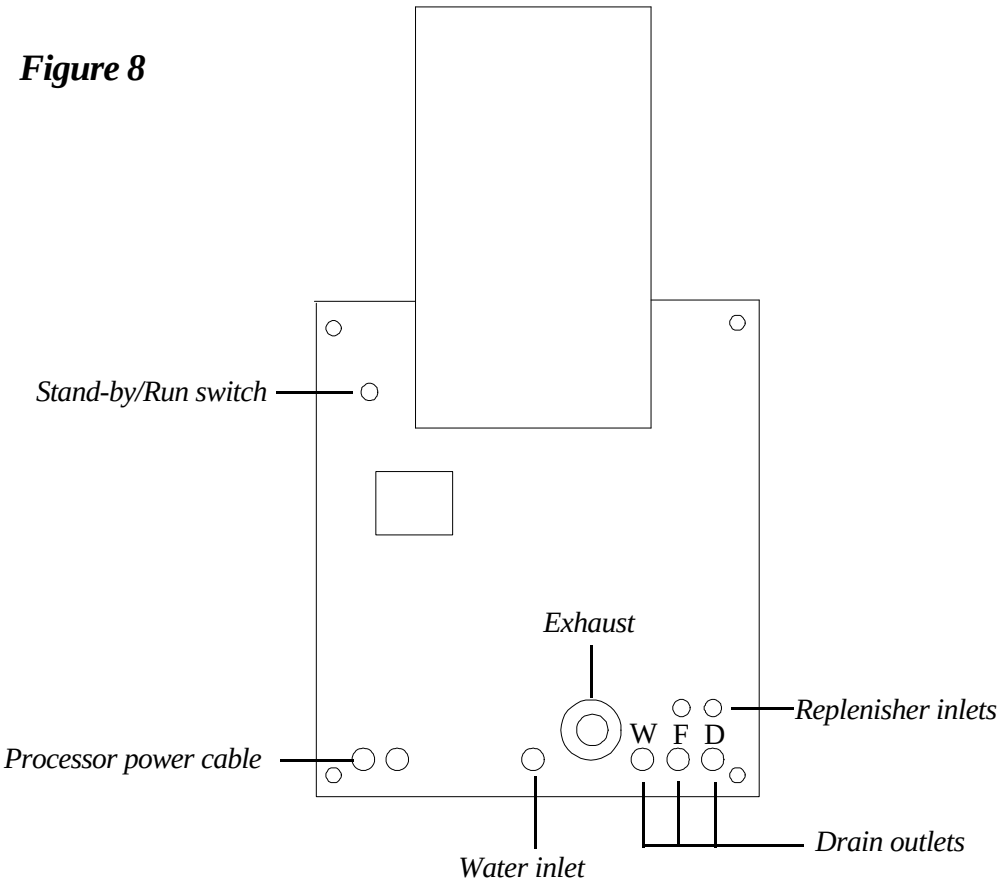
17. Remove the TOP and BOTTOM COVERS from the M35-M DRIER ASSEMBLY and retain. Remove the EXIT PLATE from the DRIER ASSEMBLY and keep one of the longer SCREWS (8/32 UNC x 5/8"). Discard the EXIT PLATE and the other SCREWS. Fit the new EXIT PLATE supplied using the five new SCREWS and the one retained SCREW. See FIGURE 7.

Figure 7



18. Complete all the PLUMBING and WIRING to the PROCESSOR. See FIGURE 8 for the purpose of the HOLES in the REAR PANEL.

Figure 8



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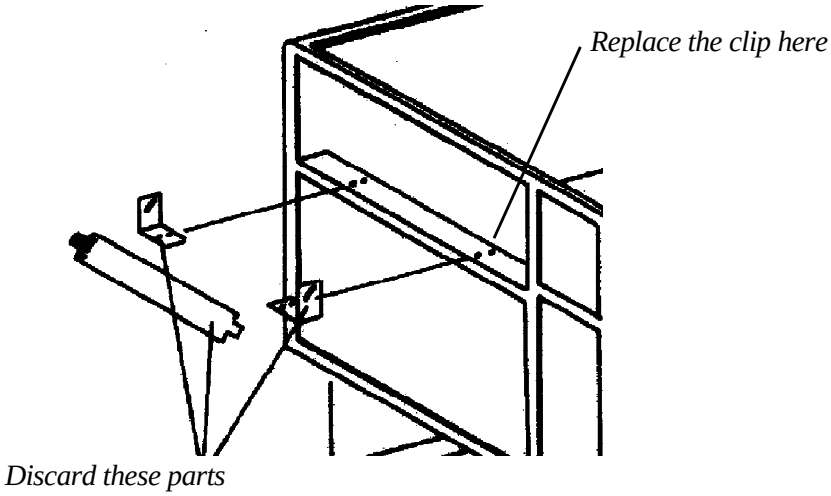
19. Discard the parts shown in FIGURE 9, but replace the CLIP which retains the ACCESS PANEL in place.

Figure 9



20. Fit the FAN GRID, using the original SCREWS, but adding the M4 STAR WASHERS. IMPORTANT - THE PAINT MUST BE REMOVED FROM THE FRAME WHERE THE STAR WASHERS CONTACT IT. See FIGURE 10.

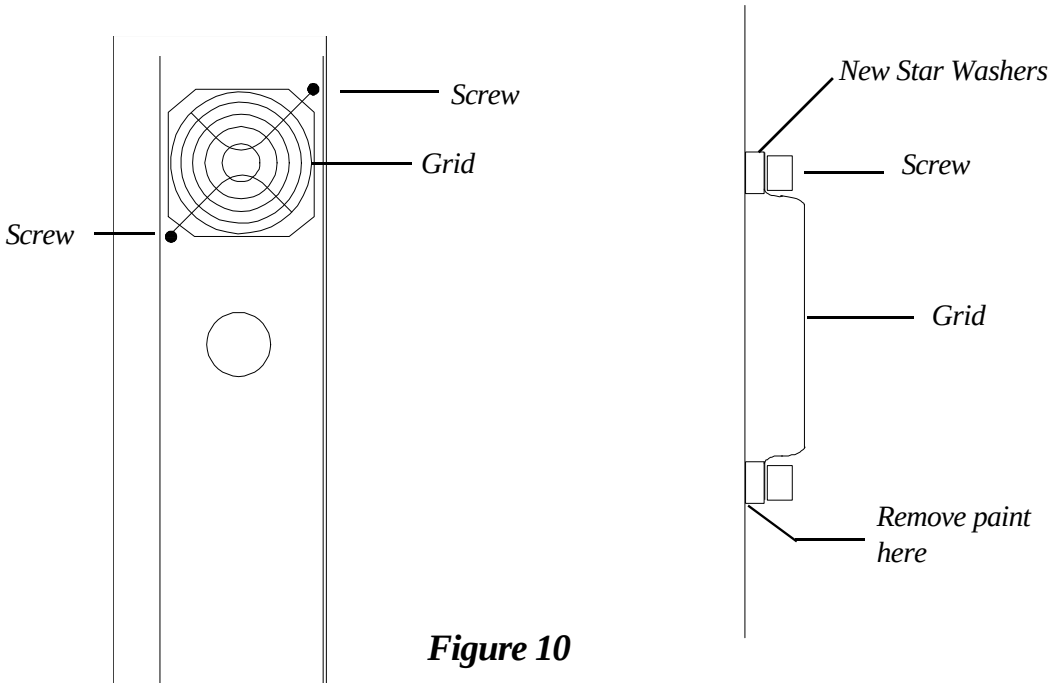


Figure 10

21. Fit the PROCESSOR protection PANELS as shown in FIGURES 11, 12 & 13.

Mount the eight M4 CAGED NUTS (30025843) in the eight holes in the PROCESSOR FRAME where indicated (removing old SPEED NUTS where necessary) and fasten the new clear PANELS and new METAL BRACKETS using the M4 COUNTERSUNK SCREWS (30015562) and CUP WASHERS (30025842). Also make the other fastenings as shown in the Figures.

Figure 11

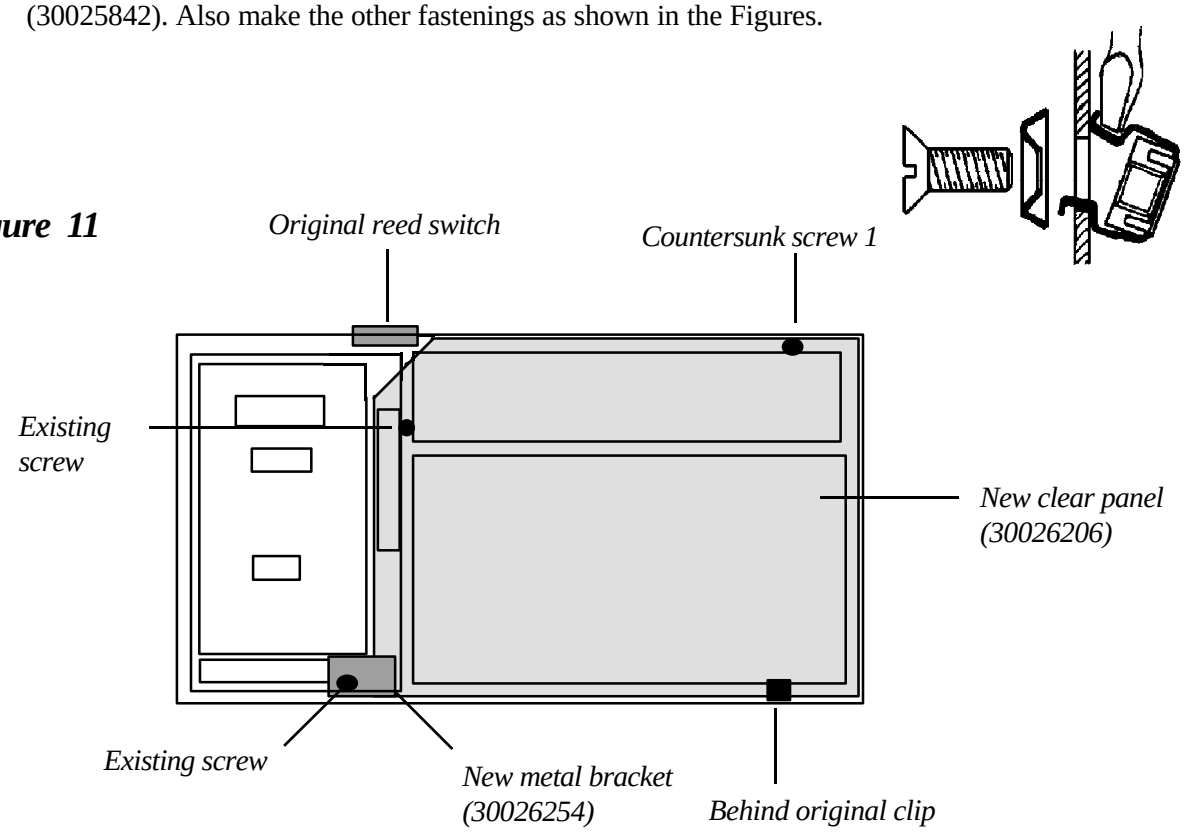


Figure 12

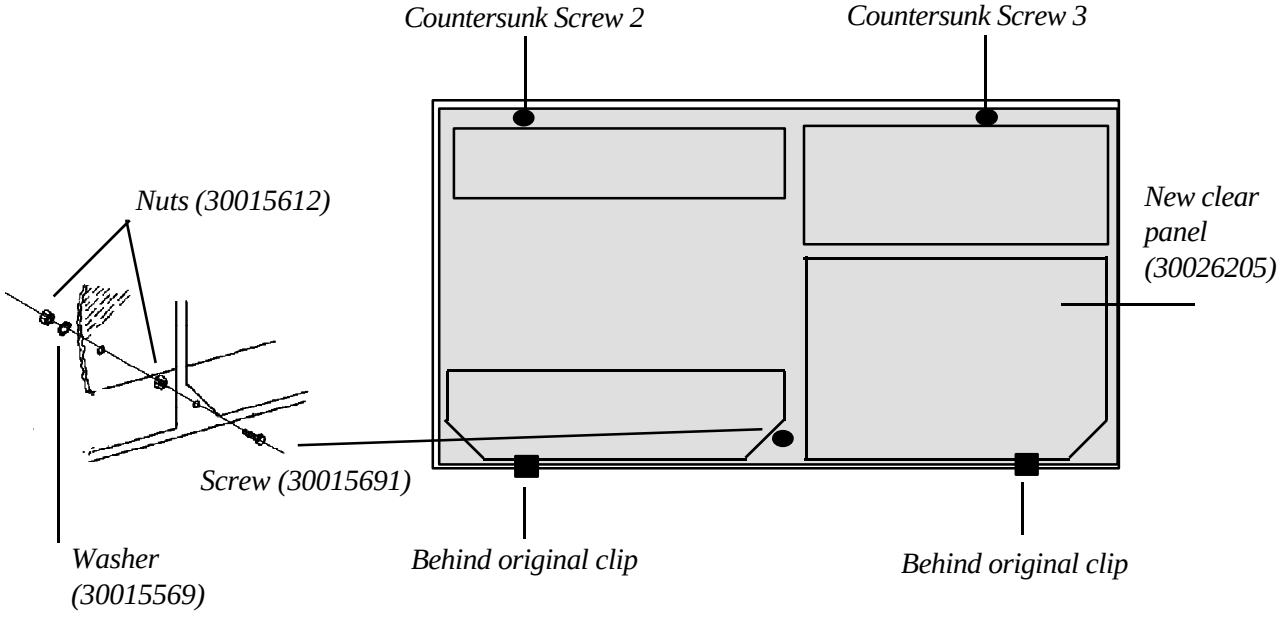


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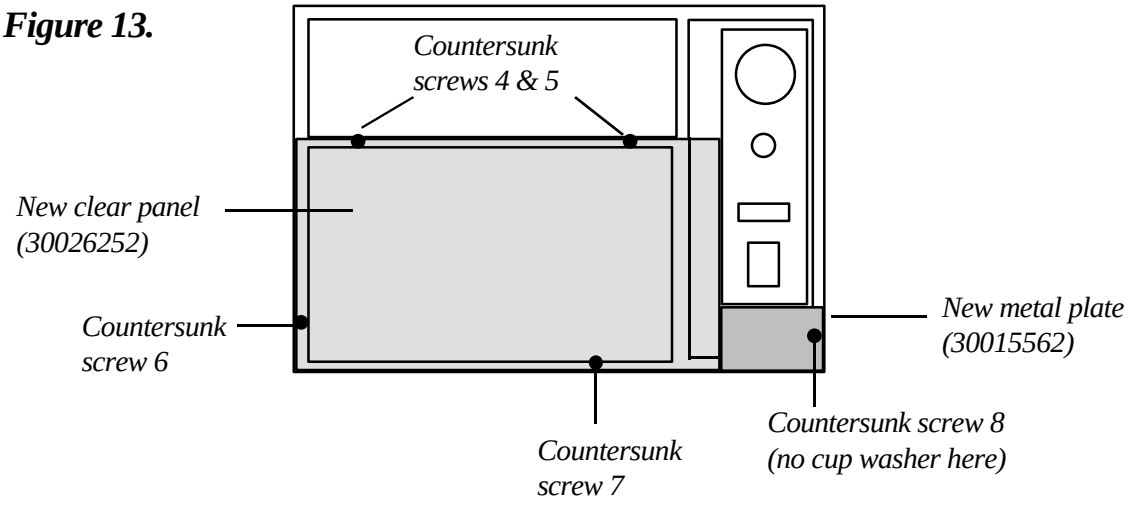
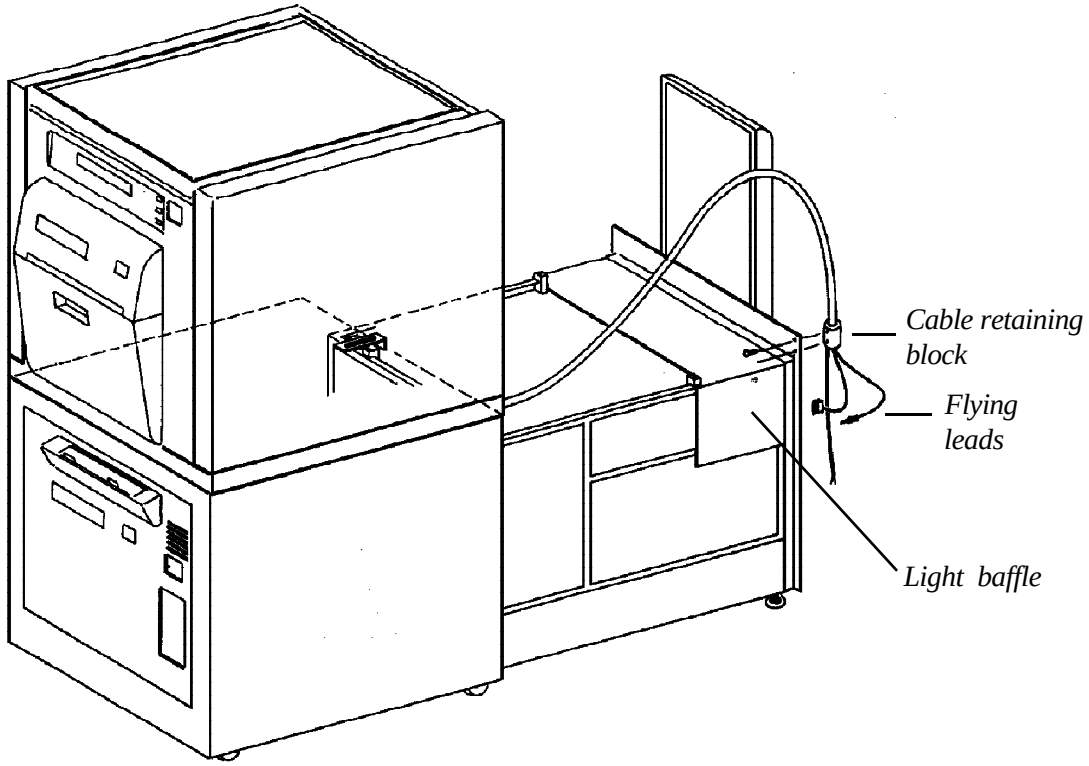
Figure 13.



22. Position the MINILOADER and STAND in front of the M35-M. Pull the Miniloader over the PROCESSOR (lifting it slightly to clear the STOPS). Fasten the CABLE RETAINING BLOCK to the PROCESSOR REAR PANEL using the SCREWS provided. See FIGURE 14. Check that the CABLE is not strained when the MINILOADER is pulled forward to its STOPS. Lay the LIGHT BAFFLE in position on the top of the PROCESSOR. Plug in the two FLYING LEADS for PHOTOCELL FC9 and STAND-BY OVER-RIDE. Pull the MINILOADER into its fully docked position and ensure the relative heights of the MINILOADER and PROCESSOR are correct. Adjust if necessary.

Figure 14



23. Complete the installation of the M35-M PROCESSOR, using the M35-M INSTALLATION MANUAL. **IMPORTANT, THE M35-M MUST BE INSTALLED IN ACCORDANCE WITH THE M35-M INSTALLATION MANUAL AND ADDITIONALLY IN ACCORDANCE WITH LOCAL PRACTICES.** Then go to, "INSTALLING THE HUMIDIFIER" on page II-22 of this PUBLICATION.

UNPACKING AND INSTALLATION INSTRUCTIONS FOR 480RA VERSION.

1. Remove the BANDING from the PACKING CASE then lift the CARTON off the MINILOADER PALETTE.

2. Remove the MAGAZINES from the top of the MINILOADER and unpack them.

   The case should contain:-

PART No.	QUANT	DESCRIPTION
xxxxxxxx	1	MINILOADER 2 PLUS VERSION 480RA
30023169	1	SUPPLY MAGAZINE 18x24 MAMMO
30023168	1	SUPPLY MAGAZINE 24x30 MAMMO
30026197	1	SUPPLY MAGAZINE 8x10 INCH VIDEO
30023197	1	SERIAL UNLOADING MAGAZINE 18x24 MAMMO
30026262	1	SERIAL UNLOADING MAGAZINE 24x30 MAMMO
30015540	2	SCREW, M4 x 30 (USED TO FASTEN MINILOADER TO PROCESSOR)
30015564	2	NUT, M4 (USED TO FASTEN MINILOADER TO PROCESSOR)
30015612	2	NUT, THIN, M4 (USED TO FASTEN MINILOADER TO PROCESSOR)
30025845	4	LARGE DIAMETER WASHER M4 (USED TO FASTEN MINI TO PROC)
30025846	4	SCREW, HEXAGON HEAD, M8 x 40 (MINI LEVELLING FEET)
30025848	4	WASHER, FLAT, M8
30025849	1	CAN OF TOUCH-UP PAINT

3. Fit the four LEVELLING SCREWS (30025846) to the tapped HOLES in the BASE of the MINILOADER.

4. Remove the LID and lift the MINILOADER onto its STAND. Drawings of suitable STANDS are shown in APPENDIX "A".

!! CAUTION TWO PEOPLE ARE REQUIRED TO LIFT THE MINILOADER !!

5. If the STAND is metal, an earth connection must be made between the STAND and the MINILOADER.. IMPORTANT - ENSURE THE PAINT IS REMOVED WHERE THE EARTH CONNECTIONS ARE MADE.

7. Remove the left hand SIDE PANEL from the MINILOADER.

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8.

Remove the following PACKING PROTECTIONS :-

a) The two RUBBER TIES that restrain the two SUCKER BARS.

b) The packing BLOCKS under the TWO SUCKER BARS.

c) The protection PACKING from the FILM EXIT CHUTE.

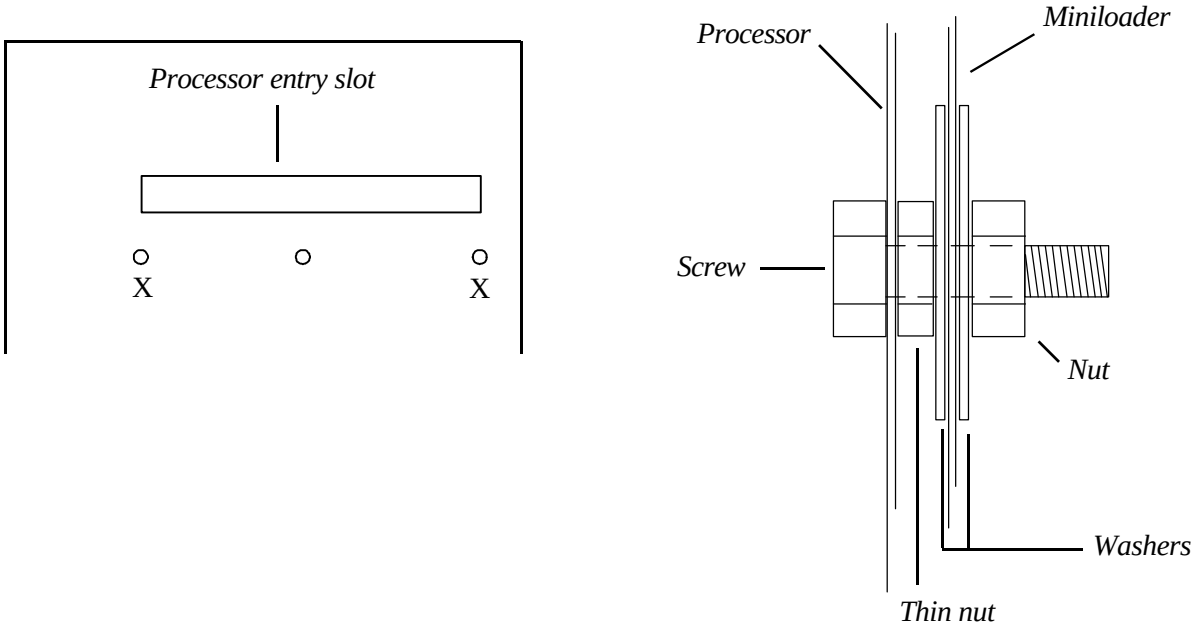
d) The TIE-WRAP from the MAGAZINE INJECTOR BAR.

e) The TIE from the CASSETTE INJECTOR.

9.

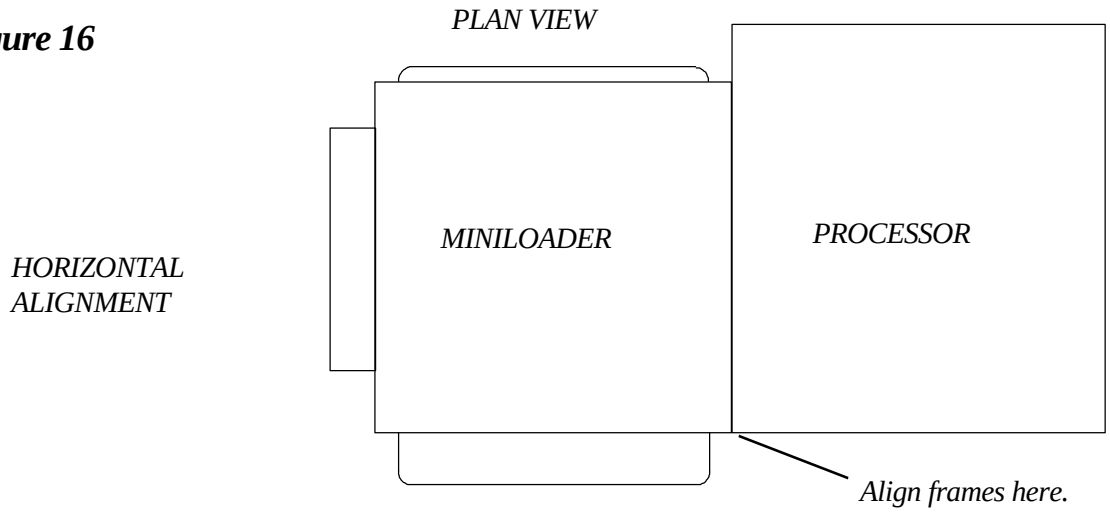
In the two HOLES under the PROCESSOR FEED SLOT marked "X", install the two SCREWS M4 x 30, and the two THIN M4 NUTS as shown below in figure 15. Place one of the M4 LARGE DIAMETER WASHERS on each SCREW.

Figure 15



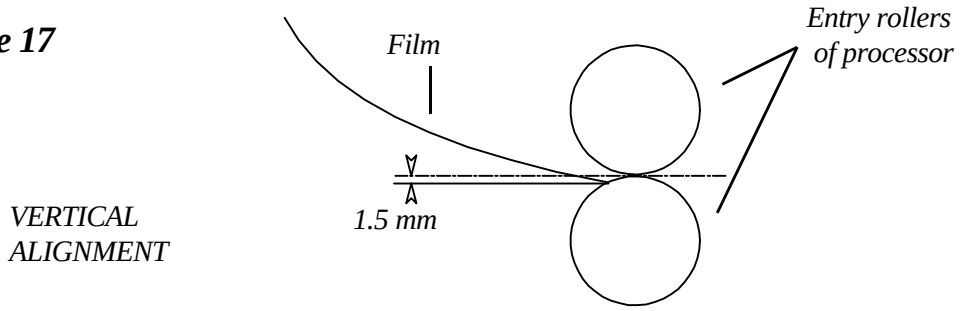
10. Align the MINILOADER and PROCESSOR horizontally as shown in figure 16, fit the other two M4 LARGE DIAMETER WASHERS and the M4 NUTS. Do not tighten the NUTS yet. It is very important to have the alignment correct, especially for an RA PROCESSOR because the CHUTE EXTENSION can interfere with the LED's inside the FILM ENTRY.

Figure 16



11. By adjusting the LEVELLING SCREWS on the MINILOADER, (and the PROCESSOR if necessary), set the height of the MINILOADER. The vertical alignment is correct when a FILM hits the lower ENTRY ROLLER 1.5 mm below the nip of the ROLLERS. See figure 17.

Figure 17



12. When both horizontal and vertical alignments are correct, tighten the M4 NUTS.

13. Go to, “INSTALLING THE HUMIDIFIER” on page II-22 of this publication to complete the installation..

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UNPACKING AND INSTALLATION INSTRUCTIONS FOR STAND-ALONE VERSION.

1. Remove the BANDING from the PACKING CASE then lift the CARTON off the MINILOADER PALETTE.

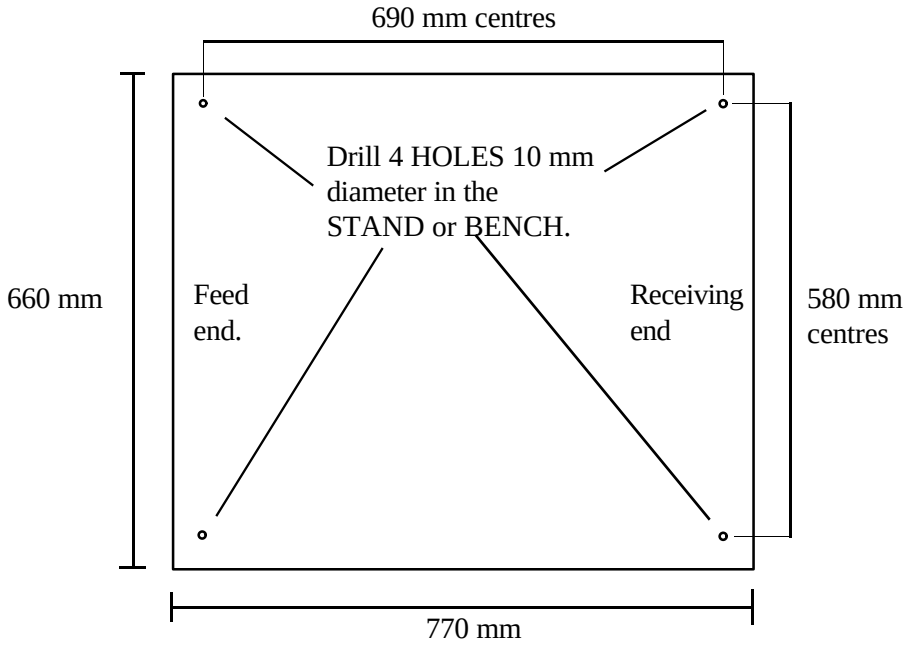
2. Remove the MAGAZINES from the top of the MINILOADER and unpack them.
The case should contain:-

PART No.	QUANT	DESCRIPTION
xxxxxxxx	1	MINILOADER 2 PLUS STAND-ALONE VERSION
30023169	1	SUPPLY MAGAZINE 18x24 MAMMO
30023168	1	SUPPLY MAGAZINE 24x30 MAMMO
30026197	1	SUPPLY MAGAZINE 8x10 INCH VIDEO
30026239	1	RECEIVING MAGAZINE 18x24 MAMMO
30026240	1	RECEIVING MAGAZINE 24x30 MAMMO / MIXED SIZES
30025845	4	LARGE FLAT WASHERS, INTERNAL DIAMETER 8 MM
30025846	4	SET SCREW, HEXAGON HEAD, M8 x 40 MM
30025847	4	SET SCREW, HEXAGON HEAD, M8 x 60 MM
30025849	1	CAN OF TOUCH-UP PAINT

3. Remove the LID and lift the MINILOADER onto a suitable STAND or BENCH. See figure 18 for details of the holes required in the STAND or BENCH to secure the MINILOADER. See APPENDIX "A" for drawings of suitable STANDS.

!! CAUTION TWO PEOPLE ARE REQUIRED TO LIFT THE MINILOADER !!

Figure 18



4. Secure the MINILOADER on it's STAND using four of the supplied HEXAGON HEADED SCREWS (use the most appropriate length SCREW 40 or 60 mm to suit the thickness of the BENCH top). If desired also use the large flat WASHERS (supplied) under the HEADS of the SCREWS. Using the large WASHERS means that the locating holes can be made larger and do not need to be as accurately drilled.

   If the STAND is metal, M8 STAR WASHERS should be used to make sure the STAND is earthed. IMPORTANT - ENSURE THERE IS NO PAINT ON THE STAND WHERE THE STAR WASHERS CONNECT.

5. Remove the left hand SIDE PANEL from the MINILOADER.

6. Remove the following PACKING PROTECTIONS :-

   a) The two RUBBER TIES that restrain the two SUCKER BARS.

   b) The packing BLOCKS under the TWO SUCKER BARS.

   c) The TIE-WRAP from the MAGAZINE INJECTOR BAR.

   d) The TIE from the CASSETTE INJECTOR.

7. There are two methods of collecting exposed FILMS in the STAND -ALONE MINILOADER.

   i) 18 x 24 and 24 x 30 mammography FILMS are collected in separate RECEIVING MAGAZINES which the OPERATOR changes when they change size. This is the default configuration. If this is the configuration you require, fix the, "24 x 30" LABEL and REFLECTIVE PATCH (packed inside the 24 x 30 RECEIVING MAGAZINE) to the MAGAZINE, see figure 19. Then go to, "INSTALLING THE HUMIDIFIER" on page II-22 of this publication.

   ii) All sizes, 18 x 24 & 24 x 30 mammography FILMS and 8 x 10 inch video FILMS are collected in one RECEIVING MAGAZINE. Note :- If the MINILOADER is set up in this way, the RECEIVING MAGAZINE cannot subsequently be unloaded by a MINILOADER using SERIAL MODE. If this is the configuration you require, proceed as follows.

8. Fix the LABEL

   "CAUTION!
   RECEIVING MAGAZINE ONLY
   CANNOT BE UNLOADED BY A MINILOADER"

   which is packed inside the 24 x 30 RECEIVING MAGAZINE onto the outside of the MAGAZINE over the existing LABEL.

   Do not fix the, "24 x 30" LABEL or the REFLECTIVE PATCH to the MAGAZINE.

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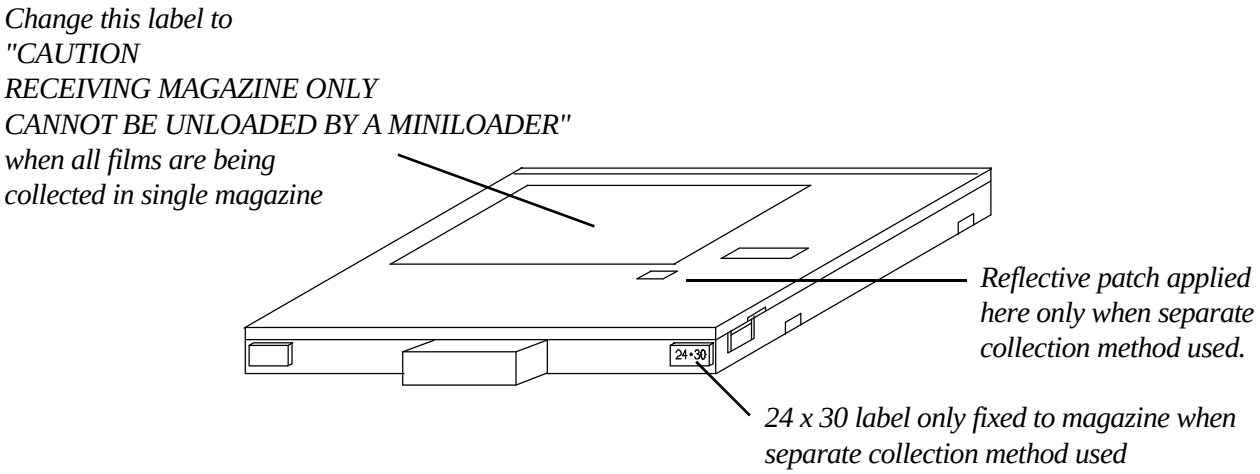
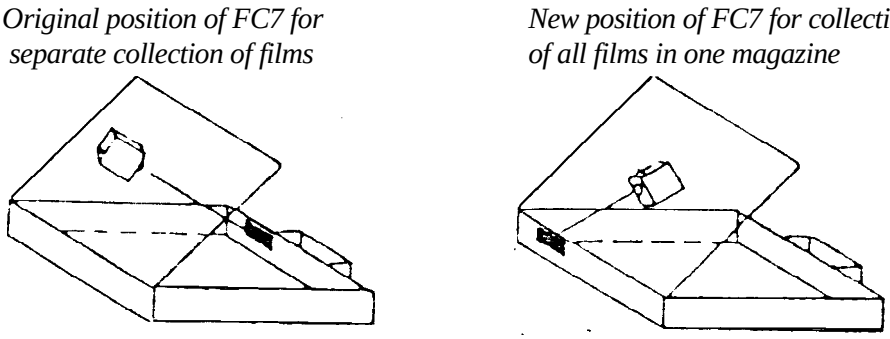
Figure 19



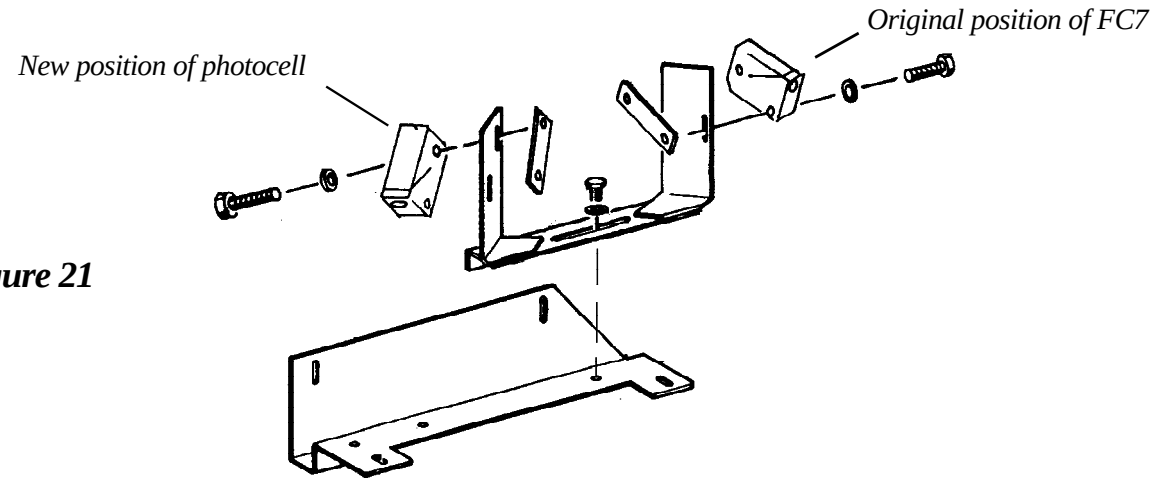
9. PHOTOCELL FC7 must be moved so it detects the MAGAZINE FULL PATCH at the HINGE end of the RECEIVING MAGAZINE. See figure 20.

Figure 20


Original position of FC7 for
separate collection of films
New position of FC7 for collection
of all films in one magazine

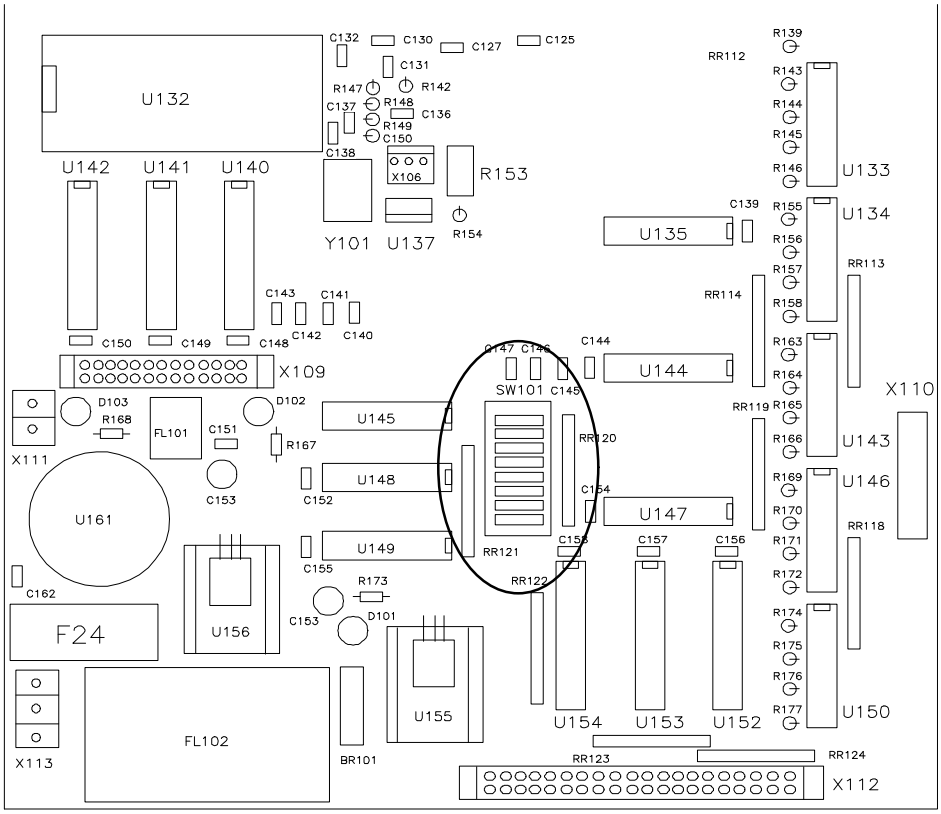
10. Unscrew the PHOTOCELL and move it to the opposite end of the mounting bracket. See figure 21. Remember to adjust the PHOTOCELL to give correct MAGAZINE FULL detection (65 FILMS maximum) as you complete the installation.

Figure 21

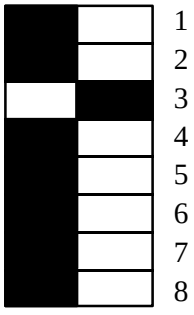


11. The DIPSWITCH on PCB 401 must be altered as shown below so the PROGRAM knows which system of collecting the FILM is in operation. See figure 22.

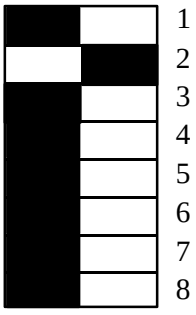
Figure 22



ALL FILM SIZES COLLECTED IN THE SAME RECEIVING MAGAZINE



18 x 24 & 24 x 30 FILMS COLLECTED SEPARATELY



12. Go to, “INSTALLING THE HUMIDIFIER” on page II-22 of this publication to complete the installation.

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MAMMOGRAPHY CASSETTE PREPARATION.

All MINILOADER CASSETTES must be patched correctly otherwise reliable operation is impossible. The CASSETTES should be patched as shown below using TOOLS 9194531 & 9194511. The correct PATCHES are PART NUMBER 9194551, REFLECTIVE FOIL 8 x 15 mm. Place 3 PATCHES (8 x 15 mm) as shown in figures 23 and 24, using the TOOLS as indicated.
If DIPSWITCH 6 on PCB 401 is turned on, no MAMMOGRAPHY CASSETTES should have a second (TYPE 2) patch.

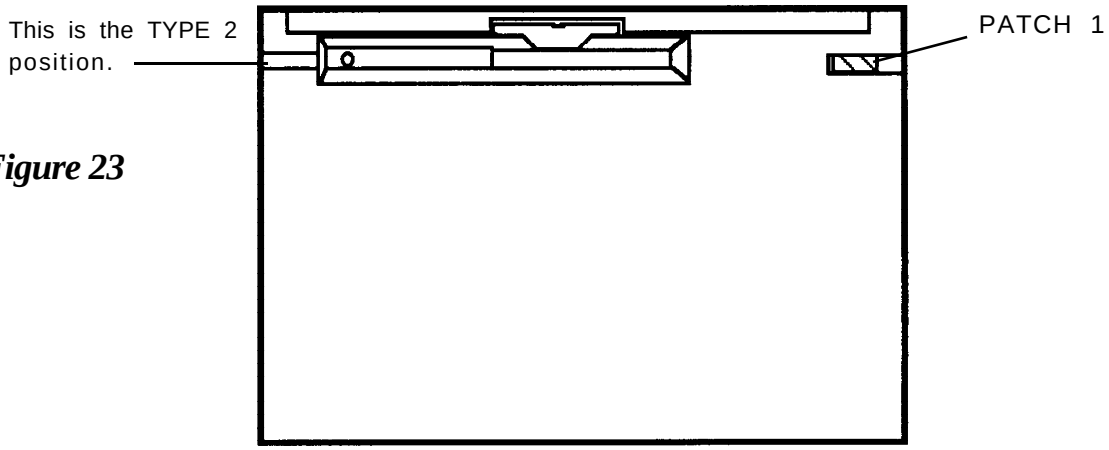
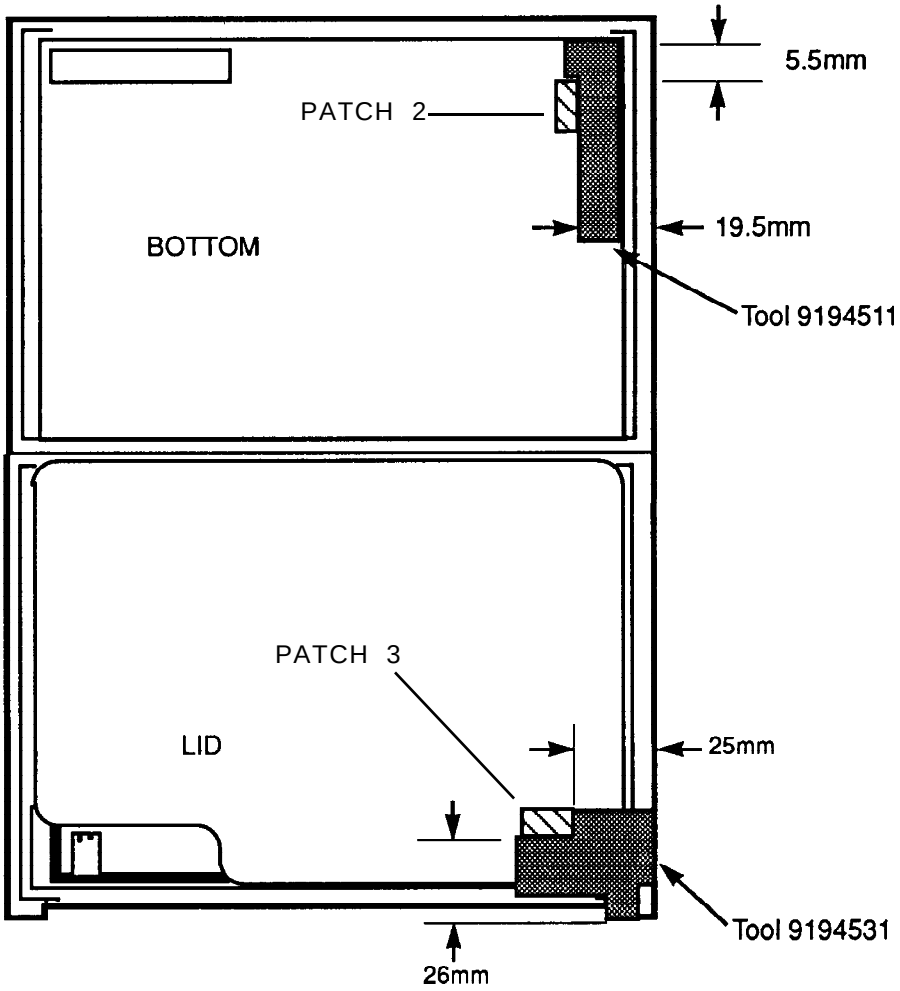


Figure 23

Figure 24

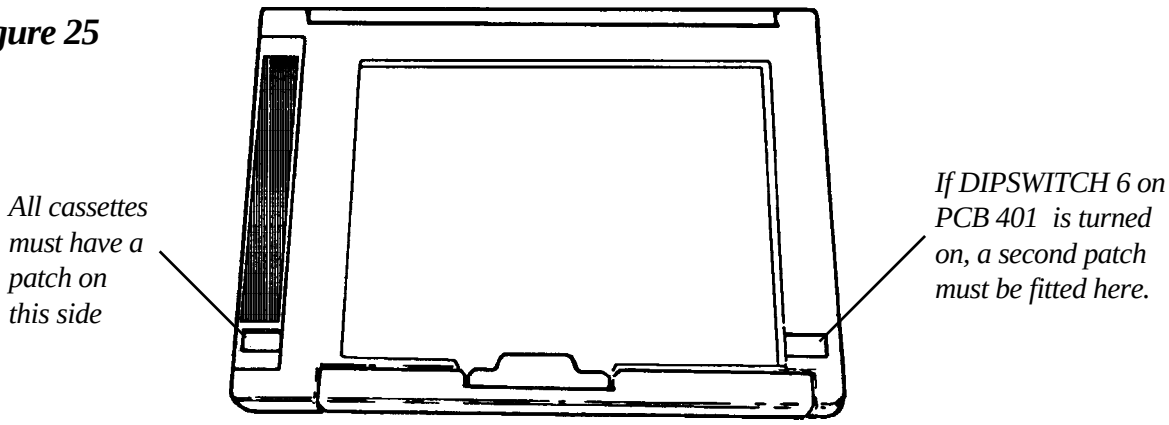


VIDEO CASSETTE PREPARATION.

All MINILOADER CASSETTES must be patched correctly otherwise reliable operation is impossible.

The correct PATCHES are PART NUMBER 9194551, REFLECTIVE FOIL 8 x 15 mm. Fit one PATCH as shown below in figure 25. If MODIFICATION 2 is active, fit a second PATCH on the opposite side. There are no PATCHES inside VIDEO CASSETTES.

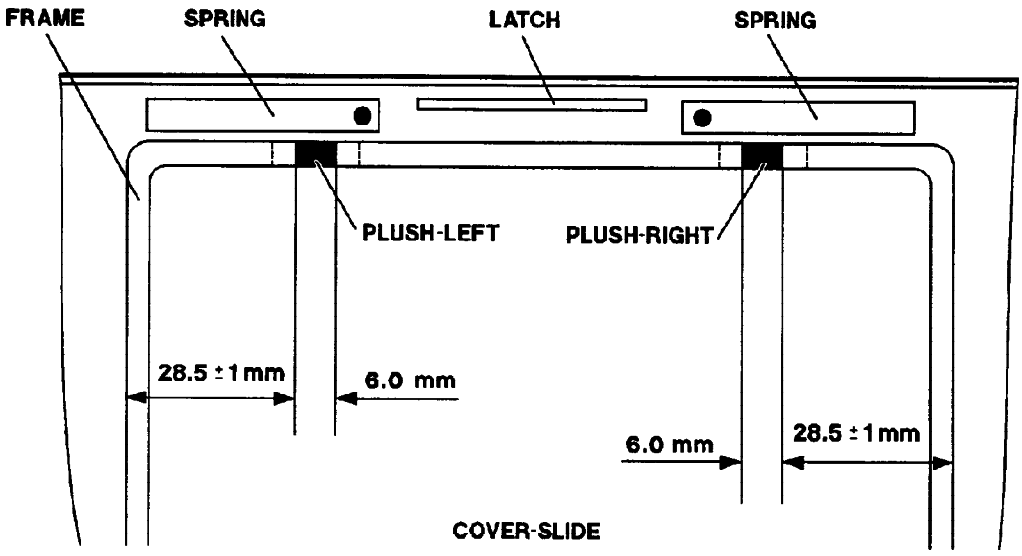
Figure 25



To prevent FILMS sticking to the FRAME of the VIDEO FILM HOLDER, self adhesive FELT PADS can be attached to the FRAME. The FELT PADS need to be cut to a length of 6 mm and fastened to the CASSETTE as shown below in figure 26. There are ten FELT PADS in a kit, and they are supplied with installation instructions.

The part number of the FELT PAD KIT is 9166451.

Figure 26



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INSTALLING THE HUMIDIFIER.

Water supply and plumbing must comply with local codes. No INLET or DRAIN HOSES are supplied with the MINILOADER and must be supplied locally.

The incoming water supply specification is:-

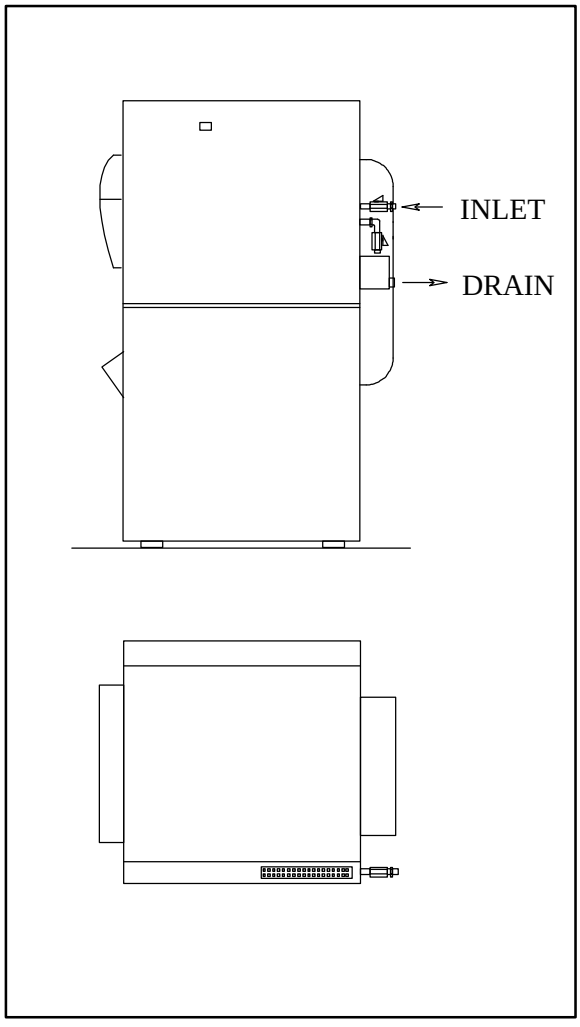
PRESSURE RANGE	0.3 to 5 Bar. Install a REGULATOR if necessary.
TEMPERATURE	4 to 29 °C. Tempered water required if temperature of incoming water is below 4 °C.
VOLUME APPROX.	1 Litre per 24 hours approximately (depending on room humidity).

A 50 micron WATER FILTER should be provided by the customer.

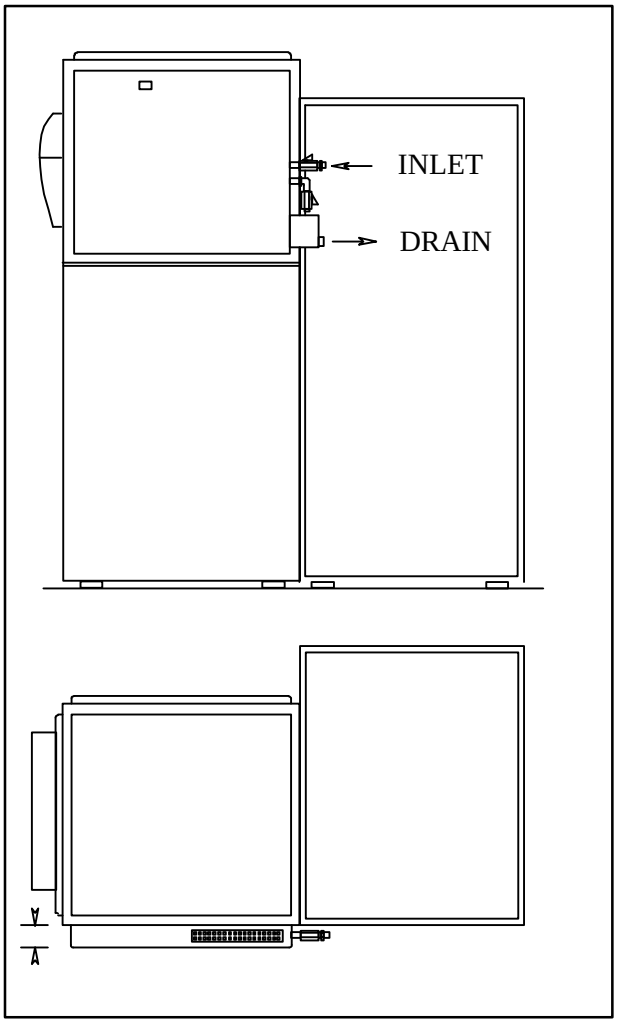
A DRAIN with a capacity of 1 Litre/minute must be provided for the HUMIDIFIER.

The position of the services to the HUMIDIFIER depend on the MODEL concerned, see the FIGURES below and opposite. If it is more convenient, the alternative DRAIN POSITION can be used. See DRAWING opposite.

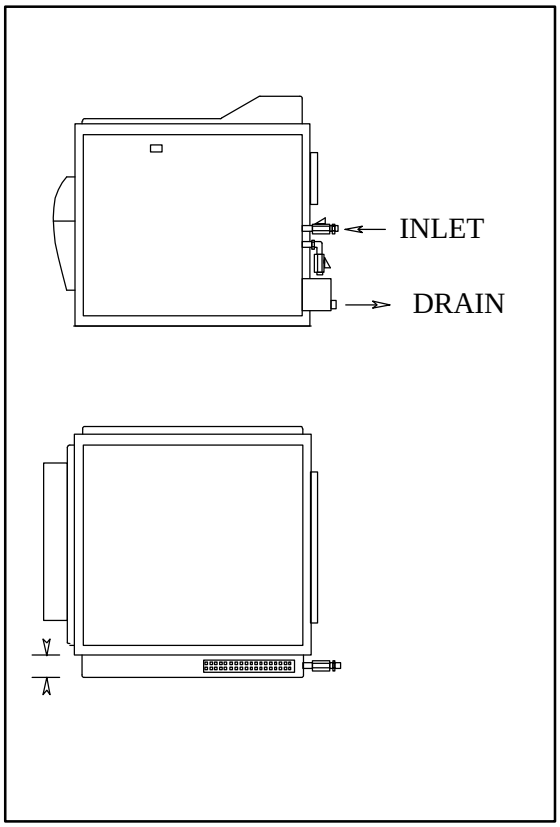
MODEL M35-M



MODEL 480RA



MODEL STAND-ALONE



Connect the water supply to the WATER INLET. If a BOTTLE is being used to supply the inlet water, the RESTRICTOR should be removed. If the water supply is at mains pressure, the RESTRICTOR ***MUST*** be fitted, otherwise water can splash inside the MINILOADER when the SOLENOID VALVE opens.

The drain must be connected. If the water supply is at mains, the drain should be connected to a fixed customer drain with a capacity of 1 litre/minute. If the water supply is from a BOTTLE, a larger size collecting BOTTLE than the inlet BOTTLE should be used.

IMPORTANT:- If the MINILOADER is in a mobile unit, or is mounted on a movable STAND, the customer must be informed that the water must be turned off and the HUMIDIFIER drained using the DRAIN VALVE, before the MINILOADER is moved. If the MINILOADER is not going to be used for some time, it is advisable to drain the HUMIDIFIER of water to prevent bacterial growth in the PAPER ELEMENT.

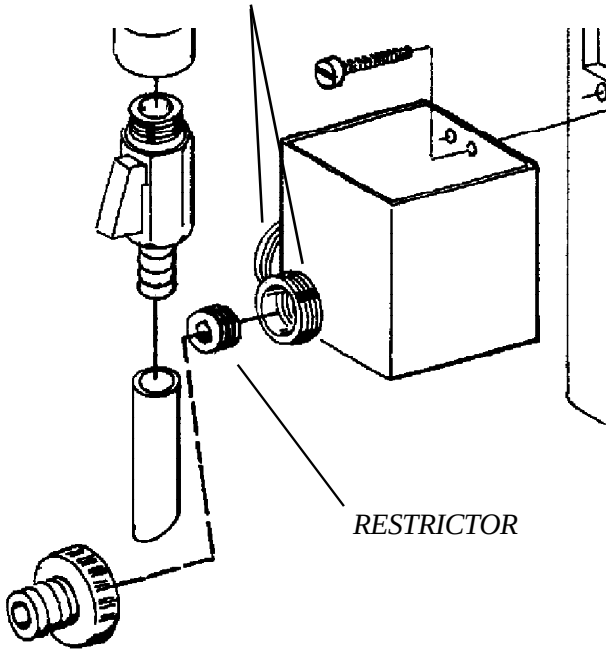
When the MINILOADER is switched on, the HUMIDIFIER is also turned on. The DISPLAY will show the current humidity inside the MINILOADER. If the humidity inside the MINILOADER is greater than the preset value, only the DRY FAN will run. If the humidity is below the preset value, the SOLENOID VALVE opens, the DRY FAN stops and the WET FAN starts to increase the humidity.

If the humidity inside the MINILOADER is different (either higher or lower) from the preset value after 10 minutes, the figures on the DISPLAY will flash. If the humidity inside is higher than the preset value nothing can be done, but if the humidity is lower, check the water supply, FLOAT VALVE and the PAPER ELEMENT.

For full details of the HUMIDIFIER, see the, "HUMIDIFIER SERVICE MANUAL" Publication number XP-3239-2. This Publication includes the SERVICE DETAILS, THEORY GUIDE, CIRCUIT DIAGRAMS and PARTS LIST.

Go to the, "INSTALLATION CHECK LIST" on page II-24 of this PUBLICATION.

ALTERNATIVE DRAIN POSITIONS



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CHECK LIST FOR COMPLETING THE INSTALLATION.

NOTE :- Remember that any adjustments, part replaced etc. should not be fed back as PURPOSE CODE XN. The correct feedback code for the problem solved should be used.

Check the modification status of the MINILOADER 2 PLUS LOW VOLTAGE. Order any type 1 required modifications necessary. Check the SOFTWARE is the latest version, and the correct language variant for your country is fitted. All MINILOADERS are delivered with language variant 1 - See TABLE.

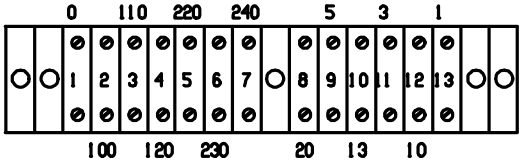
MINILOADER VERSION	LANGUAGE	VARIANT
Stand-Alone	English/Swedish	1
Processor Interface	English/German/Italian/French	1
Processor Interface	English/Spanish/Portuguese/Swedish	2
Processor Interface	English/Norwegian	3

If the MAINS PLUG is fused, a 5 Amp fuse should be fitted, otherwise the socket the MINILOADER is plugged into should be protected by a 5 or 6 Amp fuse. If the MINILOADER is powered from the PROCESSOR, the PROCESSOR should be modified to provide a fused supply. Follow local practice and regulations.

1. Check that the voltage tappings of the TRANSFORMER in the MINILOADER are set to the correct measured supply voltage. See the TABLE and DRAWING below.

MEASURED VOLTAGE	TAPPING	CONNECTION
95 - 104	100	TB2-2
105 - 114	110	TB2-3
115 - 126	120	TB2-4
210 - 225	220	TB2-5
226- 235	230	TB2-6
236 - 252	240	TB2-7

TB2 (ON TRANSFORMER)



2. Connect power to the MINILOADER.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

GREEN AND YELLOW	- EARTH
BLUE	- NEUTRAL
BROWN	- LIVE

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire coloured green and yellow must be connected to the terminal on the plug marked with the letter E or by the earth symbol ⏚ or coloured green or green-and-yellow.

The wire coloured brown must be connected to the terminal marked with the letter L or coloured red.

The wire coloured blue must be connected to the terminal marked with the letter N or coloured black.

3. Insert an INTERLOCK OVER-RIDE KEY into the TOP COVER INTERLOCK SWITCH. Turn the MINILOADER MAIN SWITCH on. The DISPLAY should read "PLEASE WAIT-RESET OPERATING" and the ORANGE LIGHT should be on. The CAM MOTOR should run until the, "HOME" position is reached. The GREEN LAMP should come on and the DISPLAY should read, "MINILOADER READY FOR FORMAT 18*24".

   If the MINILOADER does not operate correctly, consult the SERVICE MANUAL.

4. Press the OPERATOR BUTTON, "MAGAZINES TO RELOAD POSITION"
   Open the FRONT DOOR and install the 18 x 24 cm MAGAZINE, loaded with TEST FILM into the upper MAGAZINE TRAY and the 24 x 30 cm MAGAZINE, loaded with TEST FILM, into the lower MAGAZINE TRAY. Close the FRONT DOOR. The MINILOADER is now ready for testing.

5. Check the PUSH RODS etc. for tightness.

6. Clean the SUCKERS by rubbing them with grade 200 EMERY CLOTH, or a similar material, and dust them with NATURAL TALCUM POWDER. If the surface of the SUCKERS is subsequently touched, this procedure must be repeated.

7. Vacuum out the MINILOADER 2 PLUS to remove any dust.

8. Fit the STEP-BY-STEP SWITCH , run a cycle with each size of film and check the SUCKER VACUUM is between 150 & 200 millibar. Adjust if necessary. Check the COMPRESSOR reaches a minimum pressure of 2.0 bar. Correct if necessary.

9. Run several cycles with each available size of TEST FILM, checking for correct TILT operation, good FILM separation in the SUPPLY MAGAZINE, correct insertion of FILMS into the CASSETTES and correct delivery of FILM into the CHUTE (or RECEIVING MAGAZINE, depending on version of MINILOADER). Make any adjustments necessary.

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10. Using an 18 x 24 or 24 x 30 CASSETTE, stick a FILM to the SCREEN, enter the CASSETTE and make sure the FILM is detected by PHOTOCELL FC4. Check that the CASSETTE INJECTOR is blowing in the correct place to remove the film from the SCREEN.

11. Check the operation of all other PHOTOCELLS. If the MINILOADER is a STAND-ALONE unit, remember to check the RECEIVING MAGAZINE full setting (75 to 85 FILMS for separate collection, 55 - 65 FILMS for mixed format collection).

12. Check the MAGAZINE OPENING LEVERS have the correct clearance, 6 ±1 mm, from the MAGAZINE TABS. See the SERVICE MANUAL.

13. Check the operation of the OPERATOR KEYPAD, the LIGHT BAR and the DISPLAY.

14. Check the settings of the PARAMETERS, see TABLE. Also see the THEORY GUIDE for a full description of the PARAMETERS and details of how to set them. NOTE :- If the MINILOADER is interfaced to a PROCESSOR, you must set the PARAMETER P4, "GAP BETWEEN FILMS" to suit the speed of the PROCESSOR being used. IMPORTANT :- If the PROCESSOR has adjustable speeds which can be selected by the OPERATOR, the PARAMETER must be set to suit the slowest speed being used.

PARAMETER	DESCRIPTION	STANDARD VALUE	RANGE
P1	Cassette air blow pause	1.5 Sec	1.5 - 3.5 Sec
P2	Magazine film separation blow pause	1.5 Sec	1.5 - 3.5 Sec
P3	Multiple film load detector pause	0.5 Sec	0.3 - 2.8 Sec
P4	Gap between films	Depends on processor	0.0 - 20.0 Sec
P5	Tilt pause	2.0 Sec	1.5 - 3.5 Sec
P8	Air blow cassette opening 18 x 24	30	026 - 032
P9	Air blow cassette opening 24 x 30	30	026 - 032
P10	Display brightness	1	1 - 4
P11	Multiple film check 18 x 24	155	149 - 160
P12	Multiple film check 24 x 30	148	143 - 153

15. Check that the CASSETTE is open the correct distance when the CASSETTE INJECTOR operates. If necessary adjust PARAMETERS P8 & P9. See the SERVICE MANUAL.

16. If the MINILOADER is used in a darkroom, the brightness of the DISPLAY can be adjusted by PARAMETER P10. The brightest DISPLAY is obtained by setting the PARAMETER to 1 and increasing the number through 2, 3 & 4 progressively dims the DISPLAY. If the DISPLAY is still too bright, fit the RED FILTER - PART NUMBER 30026275 inside the FRONT PANEL. The brightness of the LIGHT BAR (TRAFFIC LIGHTS) can be adjusted by R211 on PCB 502. R212 on the same PCB adjusts the BUZZER volume.

17. PARAMETERS P11 & P12 control how far the FILM is into the MULTIPLE FILM DETECTOR for 18 x 24 and 24 x 30 respectively when the MULTIPLE FILM DETECTION PAUSE occurs. The leading edge of the FILM should be 25 - 30 mm into the detector.

18. Check that the PROCESSOR (if fitted) is brought out of stand-by when a CASSETTE is entered in the MINILOADER.

19. Set the date and time on the MICROPROCESSOR (see the THEORY GUIDE). Zero all statistics and film counters (operator and ESR).

20. Remove the STEP-BY-STEP SWITCH and the INTERLOCK KEY and re-install all the PANELS.

21. Load the MINILOADER 2 PLUS with some customer FILM and make some test cycles. Examine the processed film for artifacts such as scratches, SUCKER marks and light fog. Correct as necessary. If the MINILOADER is a STAND-ALONE unit, if possible take the film elsewhere to process and do the checks.

22. Fill in the INSTALLATION REPLY FORM, and note the meter (counter) reading. Make sure the correct SERVICE CODE is used when feeding back the installation to SCAN.

SERVICE CODE	MODEL
3419	STAND-ALONE
3420	M35-M
3421	480RA

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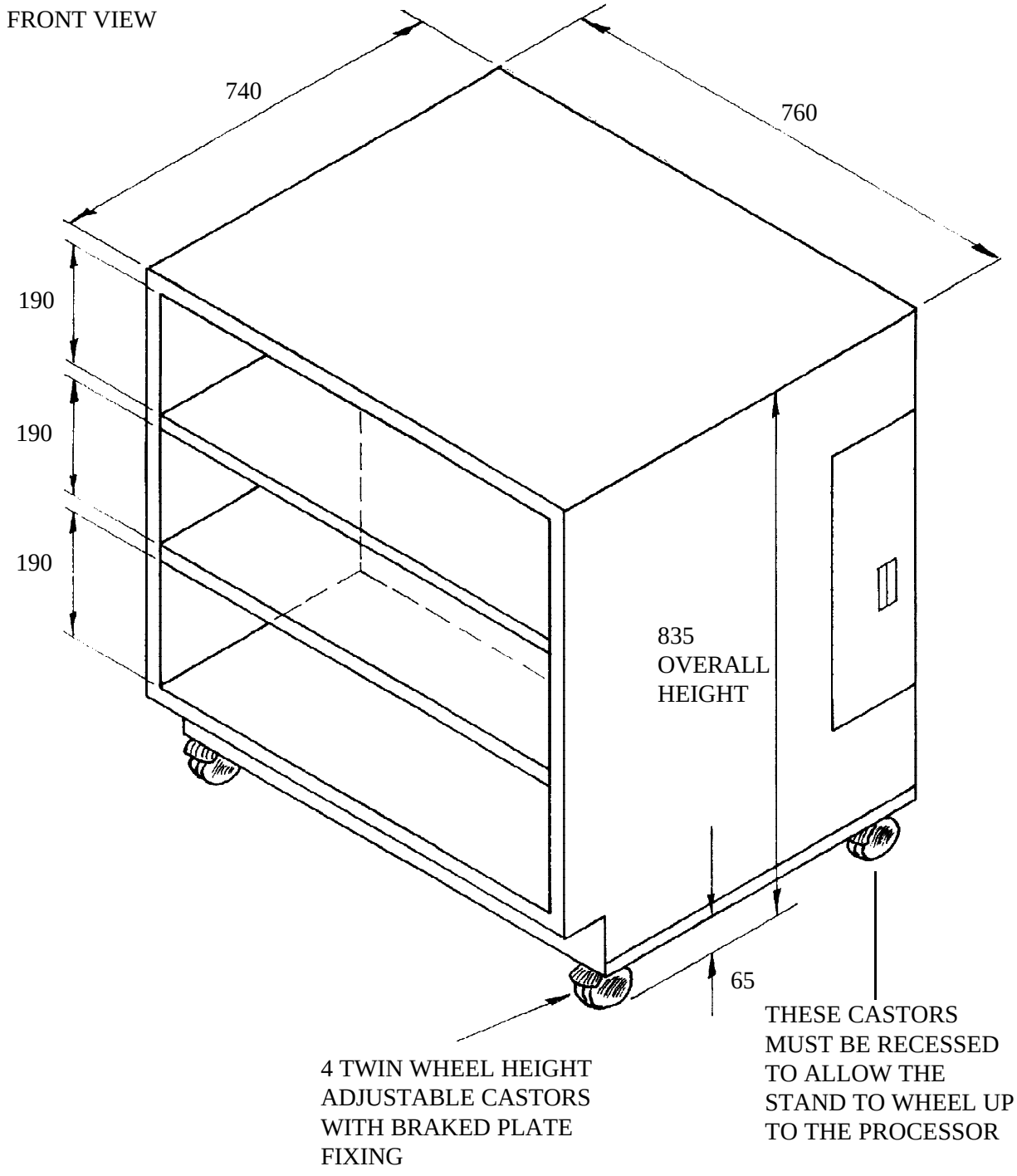
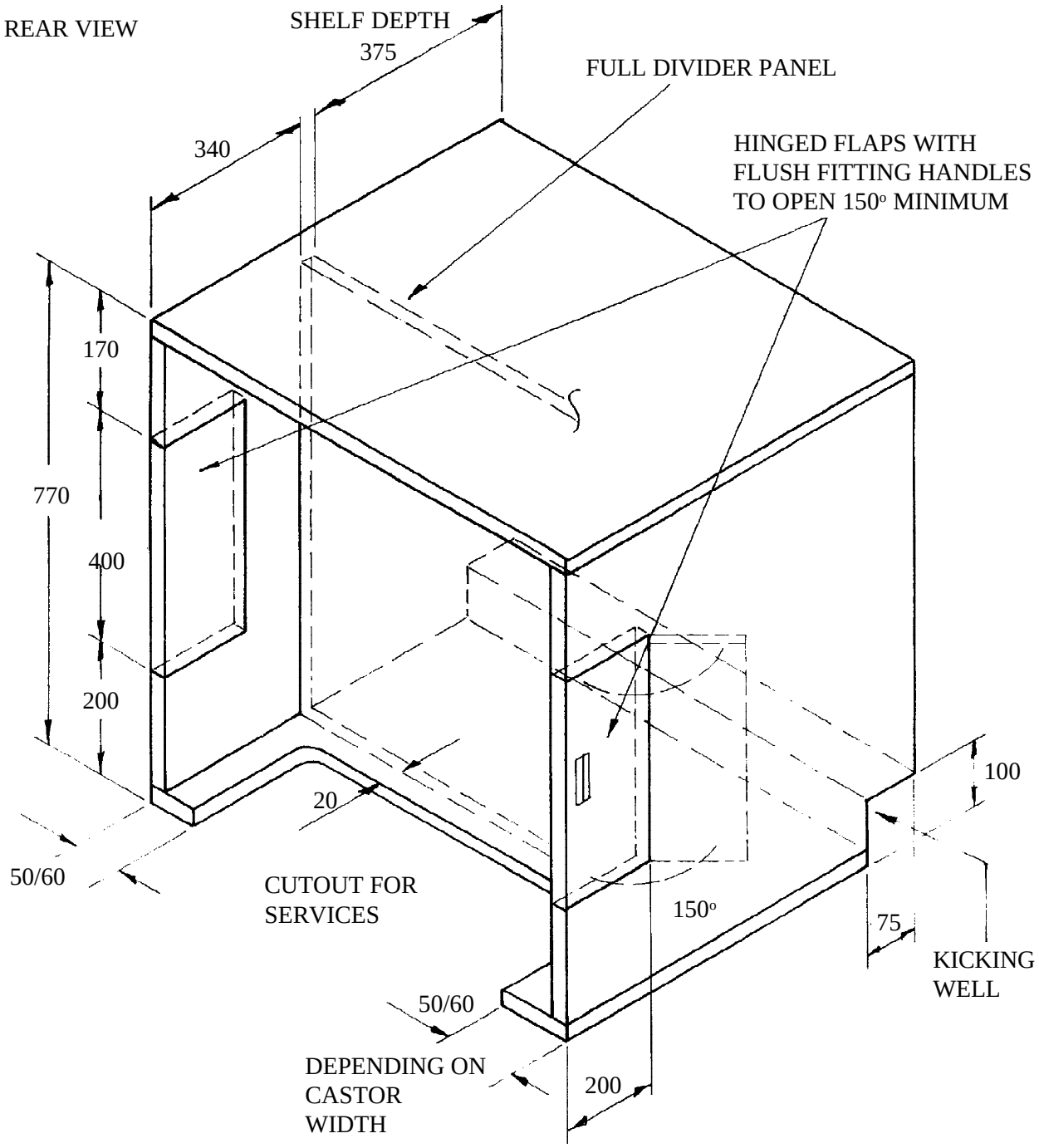
APPENDIX "A"

The STAND shown here is suitable for use with a model 480RA MINILOADER interfaced to a M6B / 460RA /480RA PROCESSOR. With adaption it could be used for a STAND-ALONE MINILOADER. If used for a STAND-ALONE MINILOADER, it would be necessary to drill four HOLES as shown in figure 18 (page II-16) in the TOP to bolt the MINILOADER to the STAND.





CONSTRUCTION IN 25 mm MELAMINE FACED LAMINATED BOARD

ALL DIMENSIONS IN MILLIMETRES - NOT TO SCALE - DO NOT SCALE FROM DRAWING

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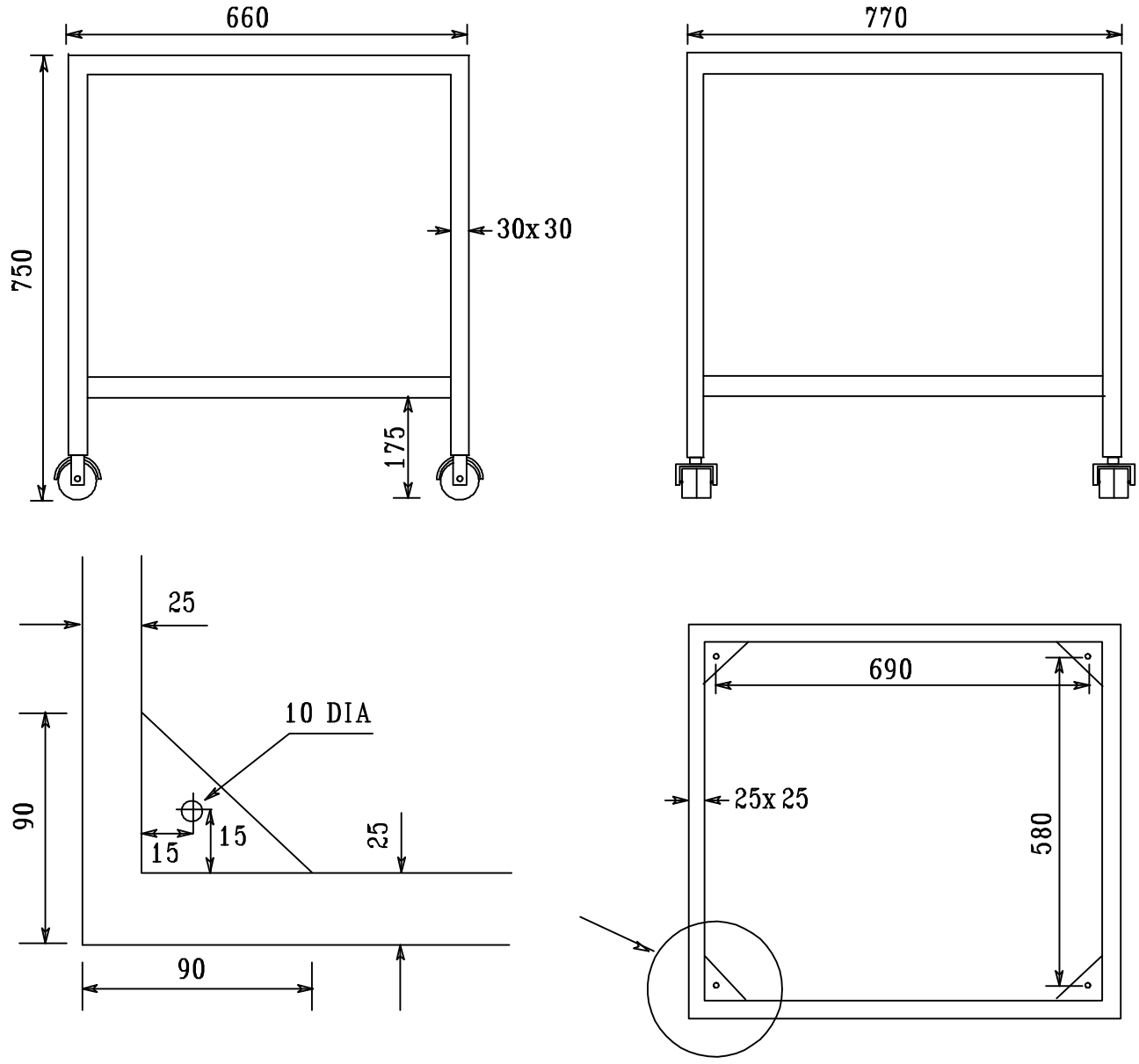
The stand shown below would be suitable for a STAND-ALONE MINILOADER. The addition of a solid TOP would reduce the noise caused by vibration. The use of some sound insulation material between the TOP and the MINILOADER would further reduce the noise.



ALL DIMENSIONS ARE IN MILLIMETRES - NOT TO SCALE - DO NOT SCALE.

The CASTORS should be adjustable for height and should be capable of carrying a load of 50 Kg each. All construction should be painted steel.

This design is not suitable for a PROCESSOR INTERFACE MINILOADER.

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